PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference 5280.01	FOR FURTHER ACTION	TION See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)	
International application No.	International filing date (day/1	nonth/year) Priority d	ate (day/month/year)
PCT/US00/24819	08 SEPTEMBER 2000		TEMBER 1999
International Patent Classification (IPC) or national classification and IPC IPC(7): H04N 7/14 and US Cl.: 348/14.08			
Applicant DISCOVERY COMMUNICATIONS,	INC.		
This international prelimin Examining Authority and is	ary examination report has transmitted to the applicant	been prepared by this according to Article 36.	International Preliminary
2. This REPORT consists of a	total of sheets.		
This report is also accompanied by ANNEXES, i.e., sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority. (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).			
These annexes consist of a to	tal of sheets.		
3. This report contains indication	s relating to the following its	ms:	
I X Basis of the repo	rt		
II Priority			
III Non-establishmet	nt of report with regard to no	velty, inventive step or	industrial applicability
IV Lack of unity of	invention		
V X Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability, citations and explanations supporting such statement			
VI Certain documents cited			
VII Certain defects in the international application			
VIII Certain observations on the international application			
			i
Date of submission of the demand	Date	of completion of this rep	ort
06 APRIL 2001	. 04	FEBRUARY 2002	
Name and mailing address of the IPEA/US Authorized officer			
Commissioner of Patents and Trademarks Box PCT Washington, D.C. 20231 MELUR RAMAKRISHNAIAH		IAH AMM of I BA	
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I. B	asis of	the report	
1. Wit	h regard	to the elements of the international application:*	
	_	ternational application as originally filed	
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X		escription:	
		(See Attached)	
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	the la	nents were available or furnished to this Authority in the following language	under Rule 23.1(b)).
		rd to any nucleotide and/or amino acid sequence disclosed in the international ry examination was carried out on the basis of the sequence listing:	application, the international
Ш	contai	ned in the international application in printed form.	
П	filed t	ogether with the international application in computer readable form.	
而	furnis	hed subsequently to this Authority in written form.	
一	furnis	hed subsequently to this Authority in computer readable form.	
П	The st	atement that the subsequently furnished written sequence listing does not go be	eyond the disclosure in the
	The st	itional application as filed has been furnished. atement that the information recorded in computer readable form is identical to the urnished.	writen sequence listing has
. 🕝		mendments have resulted in the cancellation of:	
4. X	[v]	NONE	
		the description, pages	
		the claims, Nos. NONE	
	,	the drawings, sheets/ fig NONE	
5.		eport has been drawn as if (some of) the amendments had not been made, since they	have been considered to go
in ti	lacemeni his repo	nd the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).** sheets which have been furnished to the receiving Office in response to an invitation until as "originally filed" and are not annexed to this report since they do not contains.	der Anicle 14 are referred to in amendments (Rules 70.16
	70.17). replac	ement sheet containing such amendments must be referred to under item 1 and an	nexed to this report.

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V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. statement

Novelty (N)	Claims Claims	(Please See supplemental sheet) (Please See supplemental sheet)	YES NO
Inventive Step (IS)	Claims Claims	(Please See supplemental sheet) (Please See supplemental sheet)	YES NO
Industrial Applicability (IA)	Claims Claims	(Please See supplemental sheet) (Please See supplemental sheet)	YES

2. citations and explanations (Rule 70.7)

Claims 1-8, 6-7, 9-10, 13-15, 18-19, 21, 24-35, 40, 49-58, 59-62, 69-70, 72, 74-82 lack novelty under PCT Article 33(2) as being anticipated by Theodor et al. (WO 99/44144, hereinafter Theodor).

Regarding claims 1, 13, 24, 50, and 74, Theodor discloses an electronic device, preferable an electronic book comprising: memory in which electronic data representing an electronic book can be stored, a video display (10, fig. 10), connected to the memory, from which the electronic book can be displayed, a speaker (2, figs. 10 and 12), a microphone (29, fig. 19), a transmitter connected to the microphone and a receiver connected to the speaker, wherein transmitter and receiver have sufficient bandwidth to accommodate a conference call, whereby electronic book viewer can be utilized (figs. 3 and 10, entire document), a processor connected to the memory, the video display, the speaker, the microphone, the receiver and the transmitter, conference calling software executing on the processor, where electronic book viewer can be utilized in a conference call (fig. 10, note: US PTO translator's note on page 12, which says devices shown in figs. 10 and 12 can be used for video conference conservation which implies conference calling software and required bandwidth to accommodate conference call, at least one end equipment, and an interconnection network (fig. 1) capable of linking two or more of the at least one electronic book viewer and at least one equipment in a conference call, displaying an electronic book on the electronic book viewer (fig. 10), participating in a conference call while viewing the electronic book and communicating information content of the conference call with the electronic book viewer (figs. 2-3, and 10, entire document).

Regarding claims 2-3, 6-7, 9-10, 14-15, 18-19, 21, 25-35, 40, 49, 51-53, 59-62, 69-70, 72, 74-82. Theodor further teaches the following: video display is connected to the receiver, and conference call includes a video received by the electronic book viewer, a camera (3, fig. 10) connected to the transmitter (15, fig. 12), whereby conference call includes video from the (Continued on Supplemental Sheet.)

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Supplemental Box

(To be used when the space in any of the preceding boxes is not sufficient)

Continuation of: Boxes I - VIII

Sheet 10

I. BASIS OF REPORT:

This report has been drawn on the basis of the description, page(s) 1-32, as originally filed.

page(s) NONE, filed with the demand.

and additional amendments:

NONE

This report has been drawn on the basis of the claims, page(s) 33, 35-38, 40-42, as originally filed.
page(s) NONE, as amended under Article 19.
page(s) NONE, filed with the demand.
and additional amendments:
PAGES 34, 39, AND 41, FILED WITH LETTER 15 OCTOBER 2001

This report has been drawn on the basis of the drawings, page(s) 1-10, as originally filed.

page(s) NONE, filed with the demand.

and additional amendments:

NONP

This report has been drawn on the basis of the sequence listing part of the description: page(s) NONE, as originally filed.

pages(s) NONE, filed with the demand.

and additional amendments:

NONE

V. 1. REASONED STATEMENTS:

The report as to Novelty was positive (YES) with respect to claims 4-5, 8, 11-12, 16-17, 20, 22-23, 36-39, 41-48, 54-58, 63-68, 71-73.

The report as to Novelty was negative (NO) with respect to claims 1-3, 6-7, 9-10, 13-15, 18-19, 21, 24-35, 40, 49-53, 59-62, 69-70, 74-82.

The report as to Inventive Step was positive (YES) with respect to claims NONE.

The report as to Inventive Step was negative (NO) with respect to claims 1-82.

The report as to Industrial Applicability was positive (YES) with respect to claims NONE.

The report as to Industrial Applicability was negative (NO) with respect to claims NONE.

V. 2. REASONED STATEMENTS - CITATIONS AND EXPLANATIONS (Continued):

electronic book viewer (fig. 10), transmitter and receiver comprises one of group consisting of a wireless receiver, CDMA transceiver, a cable television receiver. PSTN modem, satellite receiver (figs. 1 and 12), electronic book viewer is portable (fig. 10), a video display is connected to the receiver, and a conference call includes video received by electronic book viewer, a camera (3, fig. 10) connected to the transmitter, whereby the conference call includes video transmitted from the electronic book viewer, one end equipment is another electronic book viewer, interconnection network comprises a direct connection network between at least one electronic book viewer and at least one end equipment (fig. 10), direct connection is hardwired connection from the group consisting of in-home telephone wiring, in-home power wiring, coaxial cable, and a computer network (figs. 1 and 10), connection is a wireless connection (fig. 10), wireless connection comprises at least one from the group consisting of a radio frequency link and infrared link (figs 10 and 12), interconnection network comprises: library unit, and a connection between the library unit and one or more of the at least one electronic book viewers (fig. 1), a processor connected to the memory, the video display, the speaker, and the microphone and conference calling software for execution on the processor (figs. 2-3), initiating a conference call to one or more called parties while viewing the electronic book (fig. 10), marking a current page position in the electronic book in response to initiating step (figs. 4-9), call is related to electronic book, electronic book is a merchandise catalog (fig. 9), electronic book contains advertisement of a business and called party is the business (fig. 9), conference call is a distance learning conference call and electronic book pertains to learning (fig. 8), customizing the conference call, learning material comprises: textbook, outline (fig. 8), displaying a video image related to the video signal on the electronic book viewer, transmitting audio information from the electronic book viewer (fig. 10), audio information is a question, storing at the some of the conference call, retrieving the stored conference call, converting speech to the text (entire document).

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Supplemental Box

(To be used when the space in any of the preceding boxes is not sufficient)

Continuation of: Boxes I - VIII

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Claims 4-5 and 16-17 lack an inventive step under PCT Article 33(3) as being obvious over Theodor in view of Marasovich et al. (WO 94/07327, hereinafter Marasovich).

Regarding claims 4-5 and 6-7, Theodor does not teach the following: camera is electronically controllable and receiver receives commands to control the camera.

However, Marasovich discloses method and apparatus for on-screen camera control in video conference equipment which teaches the following: camera is electronically controllable and receiver receives commands to control the camera (figs. 2-3, page 6 lines 4-27).

Thus, it would have been obvious to one of ordinary skill in the art at the time invention was made to modify Theodor's system to provide for the following: camera is electronically controllable and receiver receives commands to control the camera as this arrangement would facilitate camera adjustment in video conference to position the camera and zoom the camera to facilitate video conference as taught by Marasovich.

Claims 8 and 20 lack an inventive step under PCT Article 33(3) as being obvious over Theodor in view of Henderson et al. (WO 99/18701, hereinafter Henderson).

Regarding claims 8 and 20, Theodor does not teach the following: the receiver has a bandwidth greater than the bandwidth of the transmitter.

However, Henderson discloses splitterless digital subscriber line communication system which teaches the following: he receiver has a bandwidth greater than the bandwidth of the transmitter (page 14, lines 4-21).

Thus, it would have been obvious to one of ordinary skill in the art at the time invention was made to modify Theodor's system to provide for the following: he receiver has a bandwidth greater than the bandwidth of the transmitter as this would facilitate downloading data at a higher rate from video sources to the user terminal as taught by Henderson.

Claims 11-12 and 22-23 lack an inventive step under PCT Article 33(3) as being obvious over Theodor in view of Munyan (US PAT: 5,761,485).

Regarding claims 11-12 and 22-23, Theodor teaches the following: conference call includes video received by the electronic book viewer and displaying video conference call (fig. 10); but he does not explicitly teach the following: video display comprises two screens, and displaying electronic book on a first screen and displaying conference call on a second screen.

However, Munyan discloses personal electronic book system which teaches two display screen comprising two screens for displaying information (20 and 30, figs. 1-2, col. 6 lines 22-34).

Thus, it would have been obvious to one of ordinary skill in the art at the time invention was made to modify Theodor's system to provide for the following: video display comprises two screens, and displaying electronic book on a first screen and displaying conference call on a second screen as this arrangement would provide two screens to display information to suite user needs.

Claims 36-39 and 54-58 lack an inventive step under PCT Article 33(3) as being obvious over Theodor in view of D'Agostino (WO 97/41688).

Regarding claims 36-39 and 54-58, Theodor teaches electronic book viewing capability (fig. 10) and merchandise catalog (fig. 9); but he does not teach the following: set-top terminal connected to the library unit, a video display system connected to the set-top terminal via two way communication path, cable television video distribution system, direct broadcast television system, directory of call initiation data and an entry of the directory relates to at least one or more called parties, personalized directory, public directory, directory comprises information concerning availability of conference calling features for the entry, conference calling features comprises at least one selected from the group consisting of audio capability, video reception capability, video transmission capability.

However, D'Agostino discloses a video directory entertainment and marketing method and apparatus which teaches

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Continuation of: Boxes I - VIII

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the following: set-top terminal connected to the library unit, a video display system connected to the set-top terminal via two way communication path, cable television video distribution system, direct broadcast television system, directory of call initiation data and an entry of the directory relates to at least one or more called parties, personalized directory, public directory, directory comprises information concerning availability of conference calling features for the entry, conference calling features comprises at least one selected from the group consisting of audio capability, video reception capability, video transmission capability (fig. 1, page 7 lines 13-37, page 8 lines 1-5, page 9 lines 10-13, page 15 lines 11-19, page 20 lines 25-30).

Thus, it would have been obvious to one of ordinary skill in the art at the time invention was made to modify Theodor's system to provide for the following: set-top terminal connected to the library unit, a video display system connected to the set-top terminal via two way communication path, cable television video distribution system, direct broadcast television system, directory of call initiation data and an entry of the directory relates to at least one or more called parties, personalized directory, public directory, directory comprises information concerning availability of conference calling features for the entry, conference calling features comprises at least one selected from the group consisting of audio capability, video reception capability, video transmission capability as this arrangement would enable the user to access various goods and services as taught by D'Agostino (page 6 line 31 to page 32 line 12).

Claims 41-48 lack an inventive step under PCT Article 33(3) as being obvious over Theodor in view of Kerr (US PAT: 5,844,600).

Regarding claims 41-48, Theodor does not teach the following: interconnection network comprises a central combining node, central combining node comprises: video combiner, an audio signal summation mode, a switch, controller, signalling module, memory capable of storing components of the conference call, stored components of the conference call comprises at least one selected from the group consisting of an audio signal, a video signal, a program file, a data file, a text file, etc.

However, Kerr discloses methods and apparatus and systems for transporting multimedia conference data streams through a transport network which teaches the following: interconnection network comprises a central combining node, central combining node comprises: video combiner, an audio signal summation mode, a switch, controller, signalling module, memory capable of storing components of the conference call, stored components of the conference call comprises at least one selected from the group consisting of an audio signal, a video signal, a program file, a data file, a text file, etc (fig. 2, col. 4 lines 27-67, col. 5, times 1-28, col. 7 lines 53-62, and fig. 7).

Thus, it would have been obvious to one of ordinary skill in the art at the time invention was made to modify Theodor's system to provide for the following: interconnection network comprises a central combining node, central combining node comprises: video combiner, an audio signal summation mode, a switch, controller, signalling module, memory capable of storing components of the conference call, stored components of the conference call comprises at least one selected from the group consisting of an audio signal, a video signal, a program file, a data file, a text file, etc as this arrangement would provide means for processing video conference information at a central node and distribute information to the participating tenninals as taught by Kerr.

Claims 63-67 lack an inventive step under PCT Article 33(3) as being obvious over Theodor in view of Shoshone (JP410285568A).

Regarding claims 63-67. Theodor does not teach the following: dynamically adding or dropping components to conference call, storing one or more components of the conference call, storing step is performed at a node in a network connecting the call, receiving one or all of the stored components of the conference call after termination of the conference call.

However, Shoshone discloses conference communication system which teaches the following: dynamically adding or dropping components to conference call, storing one or more components of the conference call, storing step is performed at the electronic viewer, storing step is performed at a node in a network connecting the call, receiving one or all of the stored components of the conference call after termination of the conference call (see abstract).

Thus, it would have been obvious to one of ordinary skill in the art at the time invention was made to modify Theodor's system to provide for the following: dynamically adding or dropping components to conference call, storing one or more components of the conference call, storing step is performed at the electronic viewer, storing step is performed at a node

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in a network connecting the call, receiving one or all of the stored components of the conference call after termination of the conference call as this arrangement would provide to keep permanent record of conference proceedings for subsequent use of the conference.

Claim 68 lack an inventive step under PCT Article 33(3) as being obvious over Theodor in view of Fujioka (JP408228328A).

Regarding claim 68, Theodor does not teach the following: authorizing access to the stored components of the conference call before retrieving step.

However, Fujioka discloses video conference terminal equipment which teaches the following: authorizing access to the stored components of the conference call before retrieving step (see abstract).

Thus, it would have been obvious to one of ordinary skill in the art at the time invention was made to modify Theodor's system to provide for the following: authorizing access to the stored components of the conference call before retrieving step as this would facilitate to control access to the stored information for authorized users as taught by Pujioka.

Claims 71 and 73 lack an inventive step under PCT Article 33(3) as being obvious over in view of Inagaki (JP408051614A).

Regarding claims 71 and 73, Theodor does not teach the following: displaying identification of a caller or calling equipment, displaying step is performed subsequent to the initiation of the participating step.

However, Inagaki discloses a video conference system and picture transmitter which teaches the following: displaying identification of a caller or calling equipment, displaying step is performed subsequent to the initiation of the participating step (see abstract).

Thus, it would have been obvious to one of ordinary skill in the art at the time invention was made to modify Theodor's system to provide for the following: displaying identification of a caller or calling equipment, displaying step is performed subsequent to the initiation of the participating step as this would facilitate to easily confirm the video conference participants as taught by Inagaki.

Response To Applicants's arguments: with respect to lack of novelty of independent claims 1, 13, 24, and 74, based on Hetuchi Theodor (Pub No: WO 99/44144), Applicants argues that "Hetuchi does not disclose or suggest an electronic book viewer comprising transmitter and receiver that "have sufficient bandwidth to accommodate conference call, whereby the electronic book viewer can be utilized to conference call" as recited in the claim 1". Contrary to Applicants's characterization of the reference, Hetuchi clearly teaches setting up conference call using camera (3, figs. 10, 12), microphone (29, fig. 12), speaker (2, figs. 10, 12), display (10, figs. 10, 12) using arrangement shown in figs. 10 and 12 (see the US PTO translator's note on page 12 of Hetuchi reference), which clearly implies applicant's claim limitations recited in the claim 1. Applicant makes similar arguments with respect to other independent claims 13, 24, 40, and 74, listed above as with respect to claim 1. Explanation given in connection with respect to lack of novelty of independent claims 1 above holds good. Applicant's arguments relating to other references such as Marasovich, Henderson, Munyan, D'Agostino, Kerr (used in establishing lack of inventive step of dependent claims) are moot as the basis of Applicant's arguments is that these references do not teach the claim limitations of independent claims 1, 13, 24, 40, and 74 which are, as matter of fact taught by the primary reference Hetuchi, as explained above. In view of the above explanation Written opinion based on the above references still holds good.

----- NEW CITATIONS -----

WO 99/44144 (HEUTSCHI THEODOR), 02 SEPTEMBER 1999, ALL

US 5,761,485, (MUNYAN), 02 JUNE 1998, ALL

US 5,844,600 (KERR), 01 DECEMBER 1998, ALL

WO 94/07327 (MARASOVICH ET AL.), 31 MARCH 1994, ALL

WO 99/18701 (HENDERSON ET AL.), 15 APRIL 1999, ALL

WO 97/41688 (D'AGOSTINO), 06 NOVEMBER 1997, ALL

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Continuation of: Boxes I - VIII	Sheet 16
P410285568A (SHISHINO), 23 OCTOBER 1998, ALL P408228328A (FUJIOKA), 03 SEPTEMBER 1996, ALL P408051614A (INAGAKI), 20 FEBRUARY 1996, ALL	
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1	8. The electronic book viewer of claim I wherein the receiver has a bandwidth greater than
2	bandwidth of the transmitter.
3	
4	9. The electronic book viewer of claim 1 further comprising:
5	a processor connected to the memory, the video display, the speaker, and the
6	microphone; and
7	conference calling software for execution on the processor.
8	
9	10. The electronic book viewer of claim 1 wherein the electronic book viewer is portable.
10	
11	11. The electronic book viewer of claim 1 wherein the video display comprises two screens.
12	•
13	12. The electronic book viewer of claim 11 wherein the video display is connected to the
14	receiver, and the conference call includes video received by the electronic book viewer, and
15	wherein an electronic book can be displayed on a first of the two screens while the video of
16	the conference call is simultaneously displayed on a second of the two screens.
17	
18	13. An electronic book viewer comprising:
19	a memory in which data representing an electronic book can be stored;
20	a video display, connected to the memory, from which the electronic book can be
21	displayed;
22	a speaker;
23	a microphone;
24	a receiver connected to the speaker;
25	a transmitter connected to the microphone, wherein the transmitter and the receiver
26	have sufficient bandwidth to accommodate a conference call, whereby the electronic book
27	viewer can be utilized in a conference call;
28	a processor connected to the memory, the video display, the speaker, the microphone
29	the receiver and the transmitter; and
30	conference calling software executing on the processor, whereby the electronic book
31	viewer can be utilized in a conference call.

32

1	49. The system of claim 24 wherein at least one electronic book viewer further comprises:
2	a processor connected to the memory, the video display, the speaker, and the microphone;
3	and
4	conference calling software for execution on the processor.
• 5	
6	50. A method of conferencing using an electronic book viewer, the method comprising:
7	displaying an electronic book on the electronic book viewer;
8	participating in a conference call while viewing the electronic book, wherein the
9	electronic book viewer comprises a transmitter and a receiver that have sufficient bandwidth to
10	accommodate a conference call, whereby the electronic book viewer can be utilized in a
11	conference call; and
12	communicating information content of the conference call with the electronic book viewer.
13	
14	51. The method of claim 50 wherein the participating step comprises:
15	initiating a conference call to one or more called parties while viewing the electronic book.
16	
17	52. The method of claim 51 further comprising:
18	marking a current page position in the electronic book in response to the initiating step.
19	
20	53. The method of claim 50 wherein the call is related to the electronic book.
21	
22	54. The method of claim 53 wherein the electronic book is a directory of call initiation data and an
23	entry of the directory relates to at least one of the one or more called parties.
24	
25	55. The method of claim 54 wherein the directory of call initiation data is a personalized directory.
26	
27	56. The method of claim 54 wherein the directory of call initiation data is a public directory.
28	
29	57. The method of claim 54 wherein an entry of the directory comprises information concerning
30	availability of conference calling features for the entry.
31	

1	68. The method of claim 67 further comprising:
2	authorizing access to the stored components of the conference call before the retrieving
3	step.
4	
5	69. The method of claim 50 wherein the participating step comprises:
6	receiving a conference call while displaying the electronic book.
7	
8	70. The method of claim 69 further comprising:
9	marking a current page position in the electronic book in response to the receiving step.
10	
11	71. The method of claim 69 further comprising:
12	displaying an identification of a caller or calling equipment.
13	
14	72. The method of claim 50 wherein the conference call comprises speech, the method further
15	comprising:
16	converting at least some of the speech to text.
17	
18	73. The method of claim 50 wherein displaying step is performed subsequent to the initiation of the
19	participating step.
20	
21	74. A method of distance learning using an electronic book viewer, the method comprising:
22	displaying learning material as an electronic book on the electronic book viewer;
23	participating in a conference call while displaying the electronic book, wherein the
24	electronic book viewer comprises a transmitter and a receiver that have sufficient bandwidth
25	to accommodate a conference call, whereby the electronic book viewer can be utilized in a
26	conference call; and
27	communicating information content of the conference call with the electronic book viewer.
28	
29	75. The method of claim 74 wherein the learning material comprises a textbook.
30	
31	76. The method of claim 74 wherein the learning material comprises an outline.